	Application No.	Applicant(s)
Notice of Allowability		
	10/578,185 Examiner	MIJOLOVIC ET AL. Art Unit
	LXAIIIIII	Artoni
	Fred M. Teskin	1713
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.		
1. This communication is responsive to		
2.  The allowed claim(s) is/are <u>1-11</u> .		
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a)  All b)  Some* c)  None of the:</li> <li>1.  Certified copies of the priority documents have been received.</li> </ul>		
2.  Certified copies of the priority documents have been received in Application No		
3. 🛮 Copies of the certified copies of the priority documents have been received in this national stage application from the		
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		
4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.		
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached		
1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).		
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.		
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Attach mont/o)		
Attachment(s) 1. ☑ Notice of References Cited (PTO-892)	5. Notice of Informal F	Patent Application
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	6. Interview Summary	• •
3. ☑ Information Disclosure Statements (PTO/SB/08),	Paper No./Mail Da 7. ☐ Examiner's Amendr	te ment/Comment
Paper No./Mail Date 20060504  4. Examiner's Comment Regarding Requirement for Deposit	8. X Examiner's Stateme	ent of Reasons for Allowance
of Biological Material	9.	
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## Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

Claims 1-11 are allowed over the closest references cited below.

The present invention is drawn to a substituted cycloalkane of formulae Ia, Ib and Ic as depicted in claim 1 hereof; a process for preparing a substituted cycloalkane as claimed in claim 1(claims 5-8); and a cationic polymerization process, which comprises polymerizing cationically polymerizable ethylenically unsaturated monomers in the presence of a substituted cycloalkane as claimed in claim 1 (claims 9-11).

EP 0713883 discloses a process for producing isobutene polymers by cationic polymerization of isobutene in the presence of an initiator system as broadly described at page 2, line 31 to page 3, line 3. Suitable initiator compounds are said to include "all organic compounds having at least one nucleophilically displaceable leaving group" (page 9, II. 10-12); preferred compounds conform to, e.g., the general formulae 1-A to 1-D on page 10 thereof. A substituted cycloalkane according to applicants' claim 1 is neither taught nor fairly suggested in EP '883.

Lang *et al* teach a process for preparing isobutene polymers, wherein isobutene and, as initiator, a cyclopentene derivative of the formula (I) in column 1 are reacted in the presence of a Lewis acid. In the formula (I), it is stated that X is preferably halogen, in particular chlorine and 3-chlorocyclopentene is said to be particularly preferred. The use of a substituted cycloalkane conforming to claim formula Ia, Ib or Ic is neither taught nor fairly suggested in Lang *et al*.

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Kuntz discloses isobutylene homo- and co-polymers prepared by use of a catalyst system comprising a haloadamantane component and a Lewis acid. Catalyst systems illustrated in Kuntz are based on specific mono- and poly-halo adamantanes together with diethylaluminum chloride or BF<sub>3</sub> (Tables I-III). Nowhere in Kuntz is a substituted cycloalkane conforming to claim formula Ia, Ib or Ic mentiond; nor can it said that the claimed compound would have been suggested to those of ordinary skill in the art from a fair reading of the Kuntz teachings.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication should be directed to Examiner F. M. Teskin whose telephone number is (571) 272-1116. The examiner can normally be reached on Monday through Thursday from 7:00 AM - 4:30 PM, and can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached on (571) 272-1114. The appropriate fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FRED TESKIN
PRIMARY EXAMPLE

FMTeskin/06-11-07